



Proof 1833 Half Dollar

John Reich Journal

Volume 5/Number 3

December 1990

JRCS

JOHN REICH COLLECTORS SOCIETY
P.O.Box 205 Ypsilanti, Mich. 48197

The purpose of the John Reich Collectors Society (JRCS) is to encourage the study of numismatics, particularly United States gold and silver coins minted before the introduction of the Seated Liberty design, and to provide technical and educational information concerning such coins.

Annual dues \$10.00

For membership information write to the above address.

The **John Reich Journal** is the official publication of the Society and is distributed to all members in good standing. Members are encouraged to submit any articles encouraging the study of numismatics and/or relating to early United States gold and silver coins to the editor. Especially needed are articles containing new information about die varieties, die states of published die varieties, attribution methods, collections, collectors, etc. Inquiries about specific varieties will be directed to one of the experts in that series. All correspondence should be directed to:

David J. Davis, Editor
P.O. Box 205
Ypsilanti, MI 48197

1990/1991 Officers

President David J. Davis
Vice President John W. McCloskey
Secretary William L. Subjack
Treasurer Russell J. Logan
Assistant Secretary Allen F. Lovejoy
East Coast Representative Jules Reiver
Rocky Mountain Representative Robert Spangler
West Coast Representative James Matthews

Cover Photo: GEM Proof 1833 Half Dollar "Crushed Lettered Edge"

Courtesy of:

Bowers & Merena, Inc.

Wolfeboro, New Hampshire

John Reich Journal

Official publication of the
JOHN REICH COLLECTORS SOCIETY

Volume 5 No.3

December 1990

Whole No. 14

CONTENTS

EDITOR'S COMMENTS	2
PLAUDITS, PANS, AND PERPLEXING POINTS	4
JOHN REICH AND HIS "MISTRESS" ON THE CAPPED BUST HALVES by Chuck L. Louie	5
JOHANN MATHIAS REICH, THE FACTS by Witham/Davis	9
JOHN REICH'S "SCALLOPS" by Stewart P. Witham	11
THE CRUSHED LETTERED EDGE BUST HALF DOLLARS of 1833-36 by Russell J. Logan	13
THE REAL TOUGHIES - A NUMERIC CENSUS by Sheridan Downey ...	33
'T WAS THE NIGHT BEFORE A BHNC by Anonymous	35
A LITTLE JOURNEY THROUGH, etc. by Sheridan Downey	36
AN ODE TO THE BUST HALF NUT CLUB by William Brodniak	40

EDITOR'S COMMENTS

Here is the last issue of Vol.5. Let's dedicate it John Reich, the members of BHNC, and the other half dollar collectors. All of the articles are either of a general nature or about half dollars. Collectors of the other series will have to be content with the few letters to the editor, and look forward to the next issue.

The first article JOHN REICH AND HIS "MISTRESS" ON THE CAPPED BUST HALVES, starts on page 5. It is a nice recap of most of what has been published about Reich. What author, Chuck L. Louie, didn't know when he was doing his writing, was that Stewart Witham had been researching Reich's life for years, but never wrote the definitive book he had dreamed of. Stew sent me some comments on the Louie article, and I attempted to compile them, in JOHANN MATHIAS REICH, THE FACTS (page 9).

Next is a reprint of Stew's article on JOHN REICH'S "SCALLOPS". The article is just as it was originally printed in the November, 1967, "Numismatic Scrapbook." I thought about converting the Beistle numbers to the newer Overton numbers, but didn't do it. My only reservation, on reading it, is in Stew's statement about a logo punch for the obverse stars. Is that possible? There are so many slightly rotated stars and different spacings between stars on the coins of that era. It does seem hard to believe that the scallops are so consistently placed.

This slightly thicker 40 page **Journal** is due to Russ Logan's insistence that his long article, THE CRUSHED LETTERED EDGE BUST HALF DOLLARS OF 1833-36 (page 13), not be split up. It is a reasonable request, as there is extensive documentation, and the gist of his arguments would be difficult to follow otherwise.

That and the three lead off articles about Reich were almost enough to fill the usual 36 page issue. Then to top it off, Sheridan Downey III, one of our favorite authors, sent me two articles. He wanted them published along with the Logan article. They are very timely, with the delayed publication of the updated Overton book. As I write this, I understand the books are finished and due to be shipped to California the week of January 7. If any members are considering a collection of half dollars, you should start now. The new book is sure to be the precursor of expanded interest in halves.

Sheridan's first article, THE REAL TOUGHIES - A NUMERIC CENSUS (page 33), is just what the collectors and dealers are looking for to help them determine values for the real rarities. This, A LITTLE JOURNEY THROUGH THE BUST HALF AUCTIONS OF 1988-1990, WITH PRICES REALIZED (beginning on page 36), and the new Overton book condition censuses should give everyone plenty to talk about when we all gather at the ANA Summer Convention, in Chicago. A lot of us may have to reassess our opinions of what we

can afford to collect or what is the minimum acceptable condition.

As Downey mentions in his article, the Crushed Lettered Edge marriages have once again been included in the BHNC list of Overton varieties needed to complete a set of lettered edge Turban Head Halves from 1807 - 1836. For those people who are counting, the number now required for a complete set is 453. Of course, there will always be people who feel the omission of these varieties does not mean a great deal. Most early dollar collectors covet the 1804's, but would be glad to get all the marriages but that one.

In a lighter vein, it was a surprise to receive two submissions from a couple of would-be poet laureates. Maybe **JRCS** will have to institute a new annual award for poetry. The **ODE TO THE BUST HALF NUT CLUB** (page 40) was the first entry. After I received it, I sent it to the BHNC editor. It was published in their newsletter, just before Christmas. What do you think of it?

The second entry in the poetry sweepstakes is, 'TWAS THE NIGHT BEFORE A BHNC (page 35). Here was another collector waiting for his new Overton, and you can see what happens to a frustrated half dollar nut. The author chooses to remain anonymous.

This issue completes the subscription for the 89/90 calendar year (Whew!) and renewal notices should be included for those members who have not yet sent in their checks. New members who joined since October 1, 1990 are paid up for the next year. Also enclosed is a ballot for the best liked articles of Volume 5. Vote for the three that you enjoyed the most. I would like to have your responses by February 22nd. In my continuing effort to get the **Journal** back on schedule, my goal is to finish Vol.6, No.1 by the end of February. I have a few articles on hand. If you have anything you want included, send it ASAP.

January 4th was a Good News/Bad News day for me. The Good News: I finally got to see the counterfeiting tool I wrote about, in the Vol.5, No.1. **Journal**. The Bad News: I failed to properly load the film in my camera and ended up with no pictures. I was prepared to take a splash from the die, but the Museum officials said no. I did examine the die carefully and the workmanship is excellent. The material is listed as brass, but it looks like copper to me. Is it possible that the die impression was taken from a real bust half? Don't ask me why I didn't take my Overton book with me! The die is dated 1832, not the 1835 posted on the information card. I am not sure when I will get my next chance to see it.

'Tis the end of the page, and I am limiting my usual verbosity to squeeze everything in. See enclosures for the solution to R. Logan's last puzzler. Keep those articles coming.

Send in those RENEWALS, if you want to get the next **JOURNAL**.

David J. Davis

PLAUDITS, PANS, AND PERPLEXING POINTS

Just a quick note regarding **JR Journal**, Vol.5 No.2.

The idea of a book service for the membership would benefit us greatly. I, for one, want to buy the book before the coin, but must stretch a limited budget as far as possible.

Finally, I must agree with the comments of Stephen A. Crain regarding the quality and regularity of the **Journal**. Keep up the good work; it is greatly appreciated.

David L. Kahn



I bid on seven of the coins in the Coin Galleries Sale, July 18, 1990, and got four. My problem was the opposite of yours. I underestimated the added value at sale of the scarcer varieties. The days when you can get bargains is apparently over. Lately I have been the underbidder on the scarcer varieties. Rarity has been exaggerated in some of the listings that use Jules Reiver's VIM pamphlet as the source for rarity ratings instead of the 1988 condition census; in which some of the marriages were down-graded.

However, I have felt no particular pressure "to complete my set" at a rather advanced age, so I skip over all but EF-40 or better grades.

My congratulations on the increasing use of the Condition Census in marketing, as more and more of the dealers are using it. It is my hope that this will occur also in the Seated Liberty series, which has been of more interest to me in the past. Here, too, I think we must eventually return to the Valentine classification (with additions and modifications).

William Harmon

I agree with Russell Logan that Bust Dollar Varieties are a challenging series to collect, especially when trying to collect nice original, problem free coins.

While I'm writing I would also add that I enjoyed the series that Doug Winter authored on 1795-1799 Bust Dollars.

W. David Perkins

Thank you for another fine issue of the **JR Journal**, most enjoyable reading.

Add one more Double Profile to the list, 1817 O-109. Doubled from the middle of the nose to the middle of the bust, offset 1/4mm.

Leonard Schramm

John Reich and His “Mistress” on the Capped Bust Halves

Who was John Reich? After all, the name appears most prominently on the cover of our wonderful and highly praised **Journal**. Do we really care? Or are we more interested in all of the minute die variations on the bust halves as a result of the carelessness of some of the mint employees who labored for long hours in that three story building at 37 and 39 North Seventh Street in the then capital of the United States? It is obvious that the designs on the obverse and reverse changed in 1809, but very little has been written on the circumstances that led to the design change. Why? Or is it because not enough of the design was changed to be noticeable or worth writing about?

Frank H. Stewart in his **History of the First United States Mint** provided great details on the operations of the first U.S. mint. Stewart also penned a paragraph giving a brief history of the young German named John Reich who was appointed as the assistant engraver to the then ailing Englishman, Robert Scot. Reich’s stay at the mint was a brief one, however, spanning but ten years from April 1, 1807 to March 31, 1817.

Al C. Overton in his **Early Half Dollar Die Varieties** did not provide any information on John Reich nor any description or rationale for the 1809 design change. M.L. Beistle in his precursor to Al Overton’s book did not even mention a change of design. But Don Taxay in the 1971 edition of his well known **Catalogue and Encyclopedia of U.S. Coins** does have the following note in regard to the design change: “Starting in 1809 the Liberty has a shorter neck, larger ear and shorter curls. On the reverse the eagle has differently shaped wings and the talons are spread more widely. The period after UNUM is deleted.”

Most collectors would agree that Don Taxay’s book **The U.S. Mint and Coinage** is one of the best, if not the best, reference on American coinage. In his usual eloquent manner, Don Taxay gave a very detailed account of John Reich and his struggle of gaining employment at the mint. Walter Breen, in his **Complete Encyclopedia of U.S. and Colonial Coins**, provided an excellent summary of John Reich as the Assistant Engraver and his continual battle with his contemporary critics.

Sometime after arriving from Germany as a bondsman, John Reich was freed by Henry Voigt, then chief coiner, and subsequently employed by Voigt to make scales and other fine work at the Mint. According to Don Taxay, in 1801 President Thomas Jefferson first wrote to Mint Director Elias Boudinot asking Boudinot to consider hiring Reich in the mint. By this time, Reich had already proven himself as one of the finest die-sinkers in Philadelphia. But in his response to Jefferson, Boudinot clearly stated his reluctance to hire Reich until he had a chance to ascertain the character of the newly arrived German. Of course, there was opposition from Robert Scot because he feared that Reich would eventually replace him. It is safe to speculate that this opposition from Scot greatly influenced Boudinot's decision. In the end, Reich was not offered any position, and the situation dragged on for several years.

Finally in March of 1807, when the new Mint Director, Robert Patterson (who succeeded Boudinot), wrote to the president, urging him to hire Reich in light of Robert Scot's failing health, Jefferson immediately consented. (After all, it was Jefferson's idea to hire Reich several years back.) Reich was then offered the position of Assistant Engraver at the annual compensation of six hundred dollars. Why did John Reich's predecessor, John S. Gardiner, receive \$936 per annum, according to Frank Stewart in his book? Could it be because Reich was a newly liberated bondsman and therefore could be taken advantage of by offering a lower salary?

According to Taxay, John Reich might have been one of the finest die-sinkers, but was only a moderately talented portrait engraver. Fortunately, Reich encountered little competition from the aging Robert Scot. Based on Taxay's research, it was rumored that Reich had actually portrayed on the halves his "fat mistress" in order to make her famous. A different version of the theory is that the fat mistress belonged to E. Luigi Persico of France who furnished Reich with the design. But considering the fact that the Neapolitan Persico did not arrive in America until 1818, according to the **Papers of Christian Gobrecht** of the Historical Society of Pennsylvania collection, this second theory seems almost implausible.

In his **Complete Encyclopedia of U.S. and Colonial Coins**, Walter Breen stated that when Reich's design first came out, critics attacked the design of not only portraying his "fat mistress", but also for having Ms. Liberty extravagantly buxom. But if one compares Reich's design with that of the draped bust by Robert Scot, Reich's Ms. Liberty is really no more buxom than Scot's design, proportionally. But isn't it the tradition of the American public to criticize new coin designs, regardless of the validity of the comments?

In any event, starting in 1809 Miss Liberty seems to have gained some weight and now has a more matronly appearance. John Reich's designs on the quarters and half eagles appear to be a bit more attractive. Why did John Reich change the design in 1809? It is true that many of the halves dated 1807 were not fully struck. Wasn't that a result of the spacing between the obverse and reverse dies being too great? Or maybe the high points on both the obverse and reverse coincide, therefore causing insufficient metal to fill the dies? Having a fineness of 0.8924+, could the metallurgical composition of silver and copper be not homogeneous enough for an even striking of all devices on the coin? The re-design of 1809 does reduce the size of Miss Liberty on the obverse and the eagle on the reverse. Did that solve the weakly struck problem? Hardly the case. It is common knowledge that most 1809 halves were weakly struck also. Or did John Reich change the design to present a more attractive or less buxom Miss Liberty? I do not think so. In my humble opinion, Miss Liberty on halves of 1807 and 1808 are slimmer and more attractive than those of 1809 and after. Even the eagle of 1807 and 1808 appears to be more artistic and lifelike.

According to Don Taxay, John Reich finally resigned on March 31, 1817 due to his inability to obtain a pay raise, and undoubtedly due to the never-ending criticism, after exactly ten years of service at the mint. But in Edgar E. Souders' "Thirty Questions--Or, It's Not Who You Know" (**JR Journal** Vol. 4, No. 1), failing eyesight was cited as the reason for Reich's departure from mint service. Who is right? Or could both be right? Is it also a coincidence that Reich's predecessor, James S. Gardiner, also departed from mint service shortly after Gardiner asked for a raise and Reich did not? Or could it also be related to the fire that destroyed much of the machinery used in preparing the gold and silver bullion for coinage shortly after midnight on that cold night of January 11, 1816? After all, it was well into 1817 before all of the repairs were completed. Regardless, John Reich did not leave the mint as a very happy man.

Most collectors are probably aware of the scalloped point, or notch, on the lowest right star (star 13) on the obverse of many bust halves. Sometimes the notch appears on the point closest to the curl, and at other times the notch is on the point closest to the milling. But how many collectors realize that the notch was John Reich's inconspicuous signature? That was John Reich's method of signing his work. As mentioned in Walter Breen's book, Stewart A. Witham first wrote about John Reich's signature in the November, 1967 issue of the **Numismatic Scrapbook Magazine** in the article entitled, "John Reich's Scallops". This notch last appeared on the 1818/7 O-101 and O-103 obverse die (same obverse was used) shortly before his departure on March 31, 1817. After Reich's departure the notch was gone, as evidenced by

Scot's designs of the same type from 1817 to 1823. Scot finally died at the age of 79 in 1823. One wonders how old was John Reich when he left the mint in 1817? What happened to Reich after he left the mint? Did he stay in Philadelphia?

Further study of varieties in Al Overton's book revealed that the extremely rare 1817/4 has the scalloped point. The 1817/3, however, does not have the scalloped point and neither do the rest of the 1817's. How can one explain that the 1818/7 O-101 has the scalloped point and all but one of the 1817's do not? A possible conclusion that one can draw is the following: John Reich engraved the stars on the O-101 before he left the mint. The die was never used in 1817. When 1818 arrived, the mint decided to use the 1817 die by punching an 8 over the 7. On the other hand, the 1817/4 had stars already engraved into the obverse die in 1814 by Reich, and therefore the notch. The 1817/3 obverse die must have been put to use after Reich's departure. Robert Scot, although very old, was still working at the mint. Scot must have mistakenly punched the date 1813 on the die the first time. Realizing his mistake, he then corrected it with an over-punch, a 7. Any other theories from the readers?

The readers can do a great deal more research by pursuing some of the excellent references in Don Taxay's **U.S. Mint and Coinage** or by browsing through the extensive bibliographic listing of Walter Breen's **Complete Encyclopedia**. And I sincerely hope someone would do just that. If this article has at least sparked some interest in the history of the early 19th century coinage, it has served its purpose. Happy reading into the early days of our first mint, its controversies and some of its most intriguing personalities.

Chuck L. Louie

JOHANN MATHIAS REICH, THE FACTS

The mention of John Reich in David Bruckner's letter in the issue of **JR Journal**, Vol.5, No.1, page 7 has been a real windfall.

Stew Witham has researched the life and times of Johann Mathias Reich since 1965. He studied the New York City and Philadelphia papers, Indian Affairs letters, Naval Department letters, the Simon Gratz letters collection at the Pennsylvania Historical Society in Philadelphia and other sources. He has about a 36" stack of copies of original documents which describe parts and pieces of Reich's life. After reading the previous story, Stew sent me the following notes.

- "Bondslave" - the proper term is "Indentured Servant."
- "freed by Henry Voigt" - Reich was indentured to a Philadelphia coppersmith after spending ten days on the "ANNA." The vessel arrived in Philadelphia, August 1800, from Hamburg. Reich was freed from indenture - by Voight - after one year of servitude.
- "employed by Voigt" - there is no support for this statement. Nothing has been found to support the premise that Reich worked for the Mint before 1807.
- Thomas Jefferson & Elias Bodinot - Reich wrote to Jefferson, while still on the ANNA, enclosing examples of his European work and asking for employment.
- "finest die sinker" - between 1801 and 1807 Reich executed many pieces. Insurance Company and bank seals, U.S. Military and Philosophical Society medals. Robert Scot subcontracted the Indian Peace Medal and the Truxton Medal. Reich executed the Thomas Jefferson Inaugural Medal and the Sansom Medals (Baker 54,57,58,71 and 327 - Betts 546 and 621).
- "a moderately talented portrait engraver" - Reich was an excellent engraver, including portraits, but was not an artist capable of designing images. He was a very good copiest. Reich could not and did not harden dies.
- "fat mistress" - Reich was married in Furth, Germany and had two children, but he came to America alone. There is no evidence of the mistress charge.

- "spacing between the obverse and reverse dies" - Since a screw press was in use during Reich's time, there was no spacing.
- "pay raise" - Lack of a pay raise, as a cause for resignation, is unsupportable. The real reason was Reich's eyesight. The Decatur obverse, done at this time, was called a "caricature." Furthermore, the ugly obverses of the pre-1817 pieces are, in Stew's opinion, not the work of Scot but the result of Reich's decaying eyesight.
- "how old was John Reich" - He was born in 1861 or 1862. The records show both dates.
- "after he left the Mint?" - In Philadelphia, Reich formed a partnership with one of the Starr's to make stereotype letters for the printing industry. They went bankrupt after two or three years. He then moved to Pittsburg and formed a similar firm, which also went bankrupt after a short time.
- "scallops" - see the article that begins on page 11.
- There are at least three more secondary reference works for Reich information. Julian's, Medals of the U.S. Mint - The First Century, 1792-1892, Prucha's, Indian Peace Medals in American History and Georgia Stamm Chamberlain's, American Medals and Medalists.

Stew has given up his dream to publish a book about Johann Mathias Reich and will give all of the information he has gathered to anyone capable of writing the book. Any interested authors within our membership?

S.P. Witham/Davis

 * Russ Logan's story about his numismatic puzzle *
 * just wouldn't fit on any of the pages. Therefore, *
 * it is on a separate sheet. Check the enclosures. *

John Reich's "Scallops"

M. L. Beistle in his 1929 Half Dollar Varieties book referred only twice to what I call "scallop." On page 41 in describing the obverse of his 1810 B6aG he said, "Last star has nick cut out of underside of star point that is nearest to the milling, as most of them have." Then on page 42 when detailing the obverse of 1810 B7H he said, "The last star has a nick out of the upper side of the point that is nearest to the curl."

It is interesting that these are the only times he mentions the "nicks" or "scallop" for they appear on the 13th star on every Bust Left Half Dollar from 1807 through 1815 and even to the 1817/14 Overton 1 and 2 and into the large 8 1818/17 B1A and B1J. Thus almost all of 1817 is missing on the "scallop" register—even B1A 1817/13 with the large 8. This might lead one to the conclusion that the stars had not been punched in 1813 when the die was set aside unused.

Not all "scallop" appear at the dentil star point as Beistle 1810 7H description indicates. All of the 1809 scallops are at the no. 4 position or pointing toward the curl. Moving into 1810 there is a mixture. All have the "scallop" in no. 1 or dentil pointed positions except B4D, B7H and at least one unlisted obverse which I call BW9 (it is combined with the regular BJ reverse). These three are in the no. 4 position. Thus one might deduce that they should follow the 1809's in emission order.

This strange characteristic seems to follow the career and the coin designs that are attributed to John Reich. His service with the mint dates from about April 2, 1807 until his resignation on March 31, 1817 and so follows closely the "scallop" dates.

The designs which he originated started with the Bust Half and the Half Eagle. I have checked the Half Eagles and can report the following results.

1807	scallop in #1 position
1808/7	none
1808	have not seen the coin
1809/8	scallop in #1 position
1810	scallop in #1 position
1811	scallop in #1 position
1812	scallop in #1 position
1813	scallop in #1 position
1814	scallop in #1 position
1815	have not seen the coin

Don Taxay in his "The U.S. Mint and Coinage" says that Reich redesigned the cent and quarter eagle in 1808. The 1808 Quarter Eagle has the scallop in the #1 position but I have not seen it on the large cents. In 1809 Reich's design appeared on the dime but the scallop did not follow. The quarter (not Reich's work) shows up in the subject time span only in 1815--it has no scallop.

Although the author has called the "scallop" story to the attention of some experts no definitive theory has yet developed. It has, however, created a lot of questions. Included are:

1. Was it Reich's work?
2. Did it serve a purpose or was it an accident?
3. Why did it appear in but two positions?
 - a.) pointing toward the dentils?
 - b.) pointing toward the curl?
4. Why was the position changed in 1809 and 1810 from #1 to #4 and then back again?
5. Why didn't it appear on all Reich coins of the time?

There are three conclusions that can be drawn from what we know. They are:

1. Reich was the designer because it appeared on his designs only and disappeared when he did.
2. If it served a purpose it was not important, for the use of "scallops" disappeared when Reich left the mint.
3. All 13 stars were on one punch. If it were not so--if each star was punched one at a time--the punch with the "scallops" would have shown up in some other position, i.e., as the 5th star or the 12th star, or perhaps in the 2nd or the 5th position. When you consider all the other errors of the day perfection here could not be expected. The errors I refer to include—

1807 B10G 50/20 Reverse
1810 B2B T/T in United
1813 B1A UNI reverse
1814 B8H E/A in States

Certainly the story is not finished. There must be more to tell. Can you help to fill in the details?

Stewart P. Witham

The Crushed Lettered Edge Bust Half Dollars of 1833-36

Throughout the past century students of U.S. coins have devised numismatic terms such as “Patterns”, “Pieces de Caprice”, “Restrikes”, “Class I”, or “Novodel” to describe the coins which resulted from various actions that took place in the Mint. But despite the good intentions of our numismatic predecessors, we have never been able to describe all the 19th century activities of the Mint by naming its products.

Such is the case with the “crushed lettered edge” half dollars dated 1833-6. The objective of this paper is not, however, to devise yet another bit of numismatic nomenclature. It is rather to prove when and why these coins were minted, as well as to accurately describe them and to identify the existing specimens. What future generations of numismatic scholars decide to call these bust half dollars only time will tell.

The three crushed lettered edge half dollars (hereafter referred to as CLE) which are known to the collecting fraternity today are dated 1833, 1834, and 1835. Walter Breen included them in his **Encyclopedia of U.S. and Colonial Coins** as 4703, 4709, and 4718. The Bust Half Nut Club has recently assigned them “Overton” numbers: 1833 O-116, 1834 O-122 and 1835 O-111. All have a unique obverse not known to any other business or proof strike, and share a common reverse which was also used to create Overton variety 1836-106.

In addition to the above CLE half dollars, there exists the possibility of a fourth variety dated 1836. The whereabouts of an example is not known to me today, and the only known appearance took place in 1954 at the Davis-Graves Stack’s Sale (lot 533). Only the description “edges are squared, and almost obliterate the lettering” is given, and no photo exists. Consequently we cannot conclude that it is Overton 106 or even the same reverse as the other CLE halves.

Waiting for an example of the fourth variety to resurface may delay this paper forever, but the advantages of publishing include the possibility that either lot 533 may resurface or other information concerning these CLE’s may be exposed.

The techniques used to identify the CLE half dollars include a study of their physical properties, the striking characteristics, the description of the dies, punches, and hubs compared with the contemporary proof and business struck half dollars. This information will be used in conjunction with both a reverse and an edge emission order study

to determine the actual striking of the CLE's. And, finally, the equipment and the fiscal dilemmas of the Mint will be reviewed to determine if there might have been a reason for striking the CLE half dollars.

THE COINS

Physical Properties

The initial coinage act of 1793 established the weight of half dollars at 13.48 grams with a silver fineness of .8924. The Act of 1837 amended this law and changed the weight to 13.36 grams, while the next revision, The Act of 1853, again reduced the weight to 12.44 grams. Both the 1837 and 1853 Acts established the fineness as .9000. The seven CLE half dollars available for this study have an average weight of 13.45 grams (see Table 1).

TABLE 1
RECORDED WEIGHTS OF CLE'S

<u>Year</u>	<u>Example*</u>	<u>Weight (gms)</u>
1833	A	13.448
	B	13.489
	C	13.5
1834	A	13.408
	B	13.413
	D	13.4
1835	A	13.499
Average		13.451

*See Table 7 for listing

Note: Weight of seven Crushed Lettered Edge Half Dollars averages 13.45 grams, corresponding to the Coinage Act of 1793 which was valid thru 1836.

Although the diameter of the coin was not established by law, it is significant to note the similarities in diameter between the CLE examples and the lettered edge examples. The CLE's examined average is 1.273 inches in diameter while the lettered edge halves average 1.279 inches in diameter. The reeded edge halves of 1836-39 have an average diameter of 1.205 inches (see Table 2).

TABLE 2
WEIGHT AND DIAMETER COMPARASONS OF US HALF DOLLARS
DATED 1794-1873 COMPARED WITH
THE CRUSHED LETTERED EDGE HALVES DATED 1833-35

	<u>ACT of 1792</u>		<u>ACT of 1837</u>	<u>ACT of 1853</u>
	1794 - 1836	1833 - 1836	1837 - 1853	1853 - 1873
	Flowing Hair	Crushed	Turban Head	Liberty Seated
	Heraldic Eagle	Lettered	(Reeded Edge)	
	Turban Head	Edge	Liberty Seated	
Weight (grams)	13.48	13.45	13.36	12.44
Diameter (inches)	1.279	1.273	1.205	1.205

Note: The allowable tolerance in weight for a specific planchet was ± 0.097 grams (± 1.50 grains). There was no standard for the diameter.

Both of these fundamental characteristics suggest that the CLE half dollars were made from planchets intended for use during the 1793-1836 era.

Striking Characteristics

Although all CLE's examined are proofs having received multiple blows from the working dies, all exhibit a weakness of strike in the same region of the coin. Depending upon the year, the weakness resides either on the obverse or the reverse but always in the fore curls of Miss Liberty or in the eagle's talons and olive branch stem. These areas are directly opposing each other on the coin. The 1833's and the 1835's are weak in the fore curls while the 1834's are weak in the talons.

Despite the superlatives often used to describe proof bust half dollars in auction catalogs, or the numerical grades assigned to those entombed in plastic, this striking characteristic dominates the best proof half dollars known from this era.

The reeded edge proof bust half dollars dated 1836 thru 1839 do not exhibit this striking weakness and were probably struck with the new steam press.

Diagnostic Differences of Dies

In addition to the standard obverse and reverse die descriptions used by Overton to differentiate between different working dies, the obverse master dies used for the central device (Miss Liberty) and the font size and style for the date and stars can be identified.

A master die was created by the engraver with a chisel and graver on an annealed steel blank in intaglio for the purpose of raising a hub which, in turn, could sink many working dies.¹ The individual punches for the date and stars were used for a period of time before they were discarded.

Dr. Ivan Leaman and Mr. Donald Gunnet in their paper "Edges and Die Sequences on Early Half Dollars" (presented at the American Numismatic Society during the Coinage of Americas Conference in November 1987) identified six master obverse dies used during the bust half dollar series.² Table 3 lists these obverse master dies according to Overton number for the entire bust half series.

TABLE 3
CHRONOLOGICAL LISTING OF MASTER OBERSE DIES
BUST HALF DOLLARS 1807-1836

First Master Die - 1807 and 1808

Second Master Die - 1809 thru early 1817
(1817-101/6; 110/1; 113)

Third Master Die - 1817 thru early 1832 (tuck in drapery at S1)
Early Transfers:
(1817-107/9; 112; 1818 to 1829; 1830-106/7 & 113/4)
Late Transfers (chin and neck areas reworked):
(1830-101/5; 108/12; 115/23 thru 1831; 1832-107/111; 115; 122)

Fourth Master Die - Mid 1832 thru early 1834
(1832-101/6; 112/4; 116/23; 1833 all; 1834-101/10)

Fifth Master Die - Mid 1834 - "The Abominable Bastards"
(1834-113, 114, 116)

Sixth Master Die - Late 1834 thru 1836
(1834-111/2; 115; 117/8; 1835 to 1836-101/23)

An expanded description of each CLE obverse die and the common reverse die, using the rhetoric as established by Al Overton in **Early Half Dollar Die Varieties** follows:

I) 1833 CLE OBVERSE (See Front Cover)

OBV: S1UE, S7C-TOC, S8U, S13LH. Beaded denticles (110) and a flat wire rim. All stars are sharp and well formed. Star 6 rotated counterclockwise. Top left serif on digit 1 missing. First 3 in date very low. Circular die crack from below bust thru base of date terminating at Star 13.

HUB: 4th Master Die - Mid 1832 thru early 1834

STARS: 2.8 mm Point to Point - Same as 1833

DATE WIDTH: 7.75 mm - Same as 1833

DENTICLE COUNT: 110 - Same as 1833

II) 1834 CLE OBVERSE (See Figure 1)

OBV: S1UH, S7UE-CHb, S8UE, S13C. Small Date. Beaded denticles (149) and a flat wire rim. Large dentical spacing at S8. Stars are sharp and malformed. Star 4 rotated counterclockwise and weakly struck at 4 o'clock. Heavy serif on top of digit 1.

HUB: 3rd Master Die (late) - Late 1817 thru early 1832

STARS: 2.6mm Point to Point - Late 1834

DATE WIDTH: 7.75 mm Small Date - Same as 1834 Overton 109 thru 121 (Late 1834)

DENTICLE COUNT: 149 - Same as 1834

III) 1835 CLE OBVERSE (See Figure 2)

OBV: S1UE, S7B-JCHb, S8B, S13LH. Beaded denticles (148) and a flat wire rim. All stars are sharp and well formed. Star 8 rotated counterclockwise.

Large 8 in date. Bottom knob of 3 much closer to center junction than top knob.

HUB: 6th Master Die - Late 1834 thru 1836

STARS: 2.6mm Point to Point - Same as 1835

DATE WIDTH: 7.75 mm - Same as 1835

DENTICLE COUNT: 148 - Same as 1835

IV) 1833, 1834 & 1835 CLE REVERSES (See Back Cover)

REV: A1LE, A2LH, A3UE. Beaded denticles (141) and a flat wire rim. A-A 1.25 mm. Left side of T and right side of I in line. Right serif of A1 doubled to right. Diagnostic to all coins made from this die is an engravers tool line extending from the tip of the olive branch stem.

NOTE: All known crushed lettered edge half dollars share a common reverse with 1836 O-106, a common variety which is also known in proof. This reverse is the only reverse in the entire lettered edge bust half dollar series which has beads surrounded by a flat wire rim (instead of denticles) around its periphery. The obverse of 1836



Figure 1 - The obverse of the 1834 Crushed Lettered Edge Half Dollar. (Specimen C - See Table 7) Note the heavy serif on the top of digit 1; Star 4 rotated counterclockwise.

O-106 is typical of every other bust half obverse: it has normal denticles radiating to the edge!

The obverses of all the CLE's mimic their business and proof brethren by date. There are no major font discrepancies in the date or stars; the only major discrepancy is the use of the third master die to hub the 1834 CLE. On the other hand, the obverse dentical count is absolutely correct for all three obverses according to date. The font style and the size of the numerals are also correct for each of the dates, unlike the 1804 dollars which have the plain 4 vs. the crosslet 4 discrepancy (see Table 4).



Figure 2 - The obverse of the 1835 Crushed Lettered Edge Half Dollar. (Specimen A - See Table 7) The bottom knob of the digit 3 is much closer to the center junction than the top knob.

ANALYSIS OF THE EDGE - THE THIRD DIE

Today we take the edge of a coin for granted, often forgetting that it serves four useful purposes. Back in the early 1800's when the Castaing machine and open collar dies were in vogue, a defined edge discouraged shaving, a technique for reducing the coin's diameter and weight by unscrupulous citizens who would pocket the shavings and return the piece to circulation. During the late 1820's and early 1830's, William Kneass spent a great deal of effort redesigning our Nation's coinage to perfect the closed collar edge die, which improved the striking quality, wearability and stacking characteristics of the dime (1828), half dime, quarter eagle and half eagle (1829), and quarter (1831).

TABLE 4 - MASTER DIES AND PUNCHES USED FOR THE CLE'S
AND CONTEMPORARY MARRIAGES

Date on Coin	Master Die		Width of Date		Stars (Point to Point)		Obverse Denticle Count	
	Business Strike	Crushed Lettered Edge	Business Strike	Crushed Lettered Edge	Business Strike	Crushed Lettered Edge	Business Strike	Crushed Lettered Edge
1832	3rd, 4th	--	7.75- 8.25mm	--	2.8-3mm	--	110	--
1833	4th	4th	7.5-8mm	7.75mm	2.8mm	2.8mm	110	110
1834	4th, 5th, 6th	3rd	7.5-8mm 6.5-7mm	6mm	2.4- 2.8mm	2.6mm	141-149	149
1835	6th	6th	7- 7.25mm	7.5mm	2.4- 2.6mm	2.6mm	144-149	148
1836	4th, 6th	--	7-7.5mm	--	2.4- 2.6mm	--	139-149	--

The Open Collar Edge Die

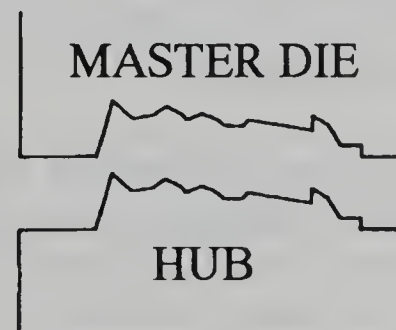
Don Taxay's book **THE U.S. MINT AND COINAGE** provides some excellent background information on the manufacturing operations of the early Mint. On page 96, Taxay quotes B. L. C. Wailes' 1829 journal relative to his observations of the coining press and the planchet feeding mechanism:

This [the coining press] is a very powerful, ingenious, simple (tho very perfect) piece of machinery. It consists (like the cutting machine) of a very powerful upright screw, to the top of which is affixed a heavy & strong lever worked with great apparent ease by one man at each end, & by which the screw is made to make about one fourth of a revolution & returning instantly to its former position. At the lower end of the screw is affixed the die which gives the impression on the upper side, & immediately under it is the die containing the impression for the reverse of the coin, around which a pair of nippers (which gives the milling or impression on the edges), & by which placing as a rivet in the manner of shears admits the introduction of the coin before & its ejection after it receives the impression. Near the lower end of

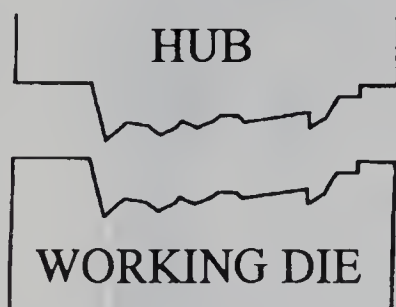
the Screw stands a tube sufficiently large to admit a considerable number of coins, one on top of the other, which may be termed the hopper, at the bottom of which is an apparatus sufficiently large to admit the passage of the coin, one at a time. The lower end in the file (or hopper) is struck out with great accuracy by a thin piece of iron made to strike edgewise at each movement of the lever and is conveyed by a channel formed for the purpose & is conveyed directly on & under the dye. The screw is brought down & the *nippers* close with a force that makes the impression. The lever is instantly brought back, the *nippers* open, the stamped coin is struck out of its place & conveyed into a Box by a spout (or conductor) as the Screw rises, and another unstamped coin takes its place, & the Screw comes down again.³ What Wailes saw and described is what we now refer to as the "open" collar



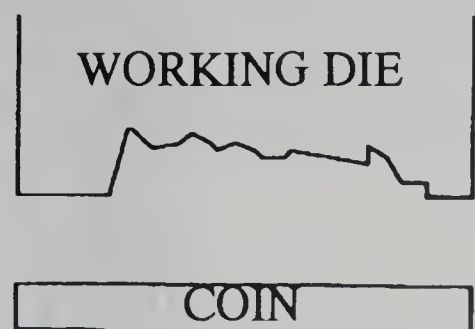
a) Master die - created by engraver with graver and chisel. Design is intaglio and contains just the central device.



b) Master die is hardened and several hubs are "raised" by force.



c) Hub detail may be strengthened by hand and the intaglio lettering added before hardening. Many working dies are taken from the hub.



d) Working die has lettering and stars added by hand before it is hardened. It is then used to strike coins. A working die is also intaglio.

Figure 3 - The relationship between the master die and coin

technique for applying a reeded edge to a coin. It is clear from this 19th century description that collar die (nippers) was in two pieces, struck the edge hard enough to form the reeding (impression), and traversed the coin's diameter to clear a passage (admits the introduction) for the next planchet/coin.

This confirms the findings of Lovejoy and Subjack in their 1986 COAC paper presented at ANS on November 1, 1986, when they concluded that the edges of open collar dimes were struck simultaneously with the obverse and reverse because a common reeding defect is oriented in the same obverse/reverse position in certain 1821 thru 1825 dimes.⁴

Also observed are off-center coins which were struck outside the collar die and have no reeding. An example of this is Figure 4, a 20% off-center 1814 bust dime. Amazingly, the 1824/25/27 bust dime reverse brockage offered in the Lovejoy Sale (Stacks' Oct 16, 1990, Lot 69) has some reeding but only (italics) on the "brockage" half of the edge!

The Closed Collar Edge Die

William Kneass was probably the most influential contributor in introducing the closed collar edge on our Federal coinage. Unlike the open collar, the closed collar die was made from a single piece of tool steel. It was produced by drilling a hole equal to the coins diameter, engraving the inside diameter with reeding, and heat



Figure 4 - a 20% off center 1814 JR-1 dime photographed with an edge mirror and struck outside the collar. It has no reeding.

treating. Because the edge die did not retract radially from the coin, this technology was not applicable to the lettered edge half dollars, where the one-piece collar die would not release the planchet if the edge was to remain lettered! Any lettering or design incused into the edge of the coin would be sheared off during extrication. Only vertical reeding or a plain smooth edge was permissible with the closed collar design.

A splendid dissertation on the conflict of closed collar versus Castaing machine coining is given in **The Fantastic 1804 Dollar** by Eric P. Newman and Kenneth E. Bressett (see pages 30-4.)⁵

Identifying Different Lettered Edge Dies

The collectors of early American coppers have been aware of and recognized that different edge dies were used to strike the large cents of 1793 (Sheldon 11a, 11b, 11c). But not until November 1, 1986 was the collecting fraternity aware that an in depth analysis had been completed for the lettered edged capped bust half dollars. This paper was presented during the "Coinage of the Americas Conference" at the American Numismatic Society in New York City by Leaman and Gunnet. They developed a method to identify different edge dies, document their characteristics and deterioration, and established an emission order (also based on obverse and reverse die usage) for the entire lettered edge bust dollar half series.

Only the CLE Bust Half Dollars and the Class I 1804 silver dollar share the crushed lettered edge defect.⁶ Both coins were first processed in a Castaing machine prior to being struck in closed collar die. This explains why both coins have wire rims and "crushed" lettered edges. The edge lettering is barely discernible, having been subsequently squashed in the smooth, close fitting collar die. The edges of all examples examined of the 1833 CLE coins exhibit less detail than the 1834 CLE (see Figure 5). All letters are visible and some have a three-dimensional form on the '34's, while on the '33's some letters are missing and many are squashed beyond recognition.

EMISSION ORDER

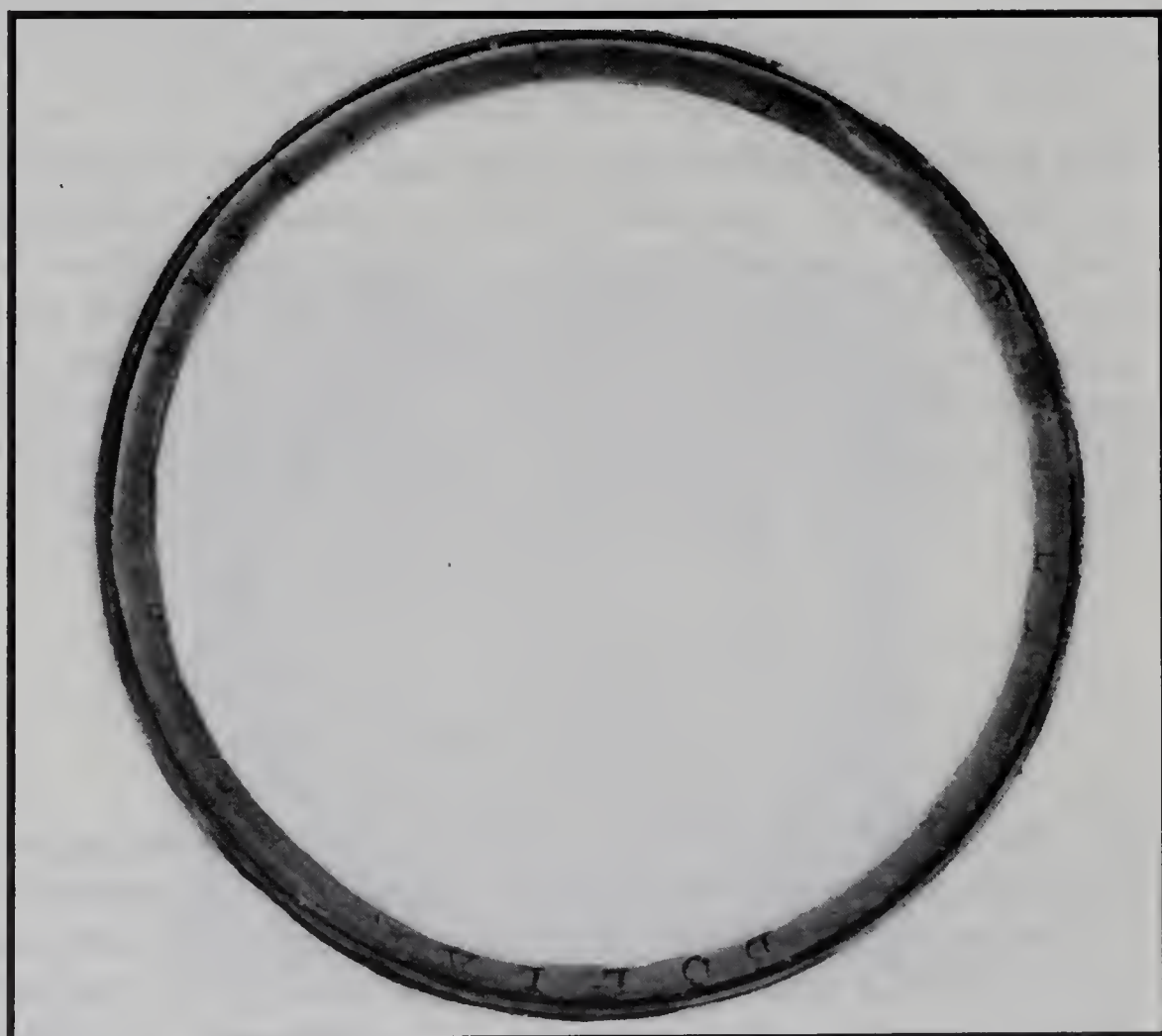
The font sizes and styles of the date, star, and denticle punches as well as the hubs will be contrasted with other obverses; the die states of the reverses will be compared to other known business and proof strikes; and the newly revealed edge die identification techniques of Leaman and Gunnet will be employed and analyzed to determine if an emission sequence of the CLE's bust half dollars can be established.

Obverse Emission Order

Because the obverses of the CLE's are not known to be paired with any other reverse, we cannot postulate on an emission sequence based on other obverse usages. But we can identify the master die, examine the fonts of the punches and count the denticles in order to compare them with other contemporary business and proof strikes.

The 1833 CLE used a master die obverse hub from the 1832-34 era which shows the chin and neck areas of the hub reworked. The stars, date and denticle count fits the year perfectly.

The 1834 CLE used a master die obverse hub from the 1830-32 era! Although this hub may appear "wrong" for the date, other documented inconsistencies occurred during the mid 1830's. A good example is the *first* use of 1834 Overton Obverse 9 (O-109) which was struck with the 4th master die in late 1835 or early 1836 when nothing but the 6th master die was in use (see Table 5). In 1834 there were two sizes for dates used on the half dollars. The 1834 CLE used the small date, the proper star size, and denticle count.



*Figure 5 - The edge of the 1834 CLE. (Specimen D - See Table 7)
The entire edge is discernible enough to attribute its edge die.*

TABLE 5
EMISSION ORDER FOR 1836 HALF DOLLARS AS PUBLISHED BY LEAMAN
AND GUNNET COMPLETE WITH THE CLE HALF DOLLARS

<u>OBVERSE</u>	<u>YEAR</u>	<u>O#</u>	<u>REVERSE</u> <u>1836</u>	<u>1st</u> <u>EDGE</u>	<u>2nd</u> <u>EDGE</u>	<u>3rd</u> <u>EDGE</u>	<u>4th</u> <u>EDGE</u>
9-'34	1834	109	A	1			
2-'35	1835	103		1	2		
6	1836	109	G	1			
6	1836	110	H	1	2		
5	1836	108	F	1	2		
	1833	CLE	E	?			
	1834	CLE	E	3			
	1835	CLE	E	?			
4	1836	106	E	2	3		
4	1836	107	F	2	3		
1	1836	101	A	3	4	5	
1	1836	102	B	2	3	5	
15	1836	119	Q	2	3	4	5
17	1836	122	S	2	5		
10	1836	114	L	5	6		
12	1836	116	N	6	12		
11	1836	115	M	7	8	10	12
14	1836	118	P	7	9		
3	1836	105	D	11	13		
18	1836	123	T	11	13		
2	1836	103	B	11	13		
2	1836	104	C	11	13		
9-'34	1834	110	C	13	14		
13	1836	117	O	13	14		
16	1836	121	D	14			
16	1836	120	R	14	15		
8	1836	112	J	15	16	17	
9	1836	113	K	15	16	17	
7	1836	111	I	17			

The 1835 CLE used a master die obverse hub from the 1834-36 era. The size and font of the stars, date and denticle count are identical to the business struck half dollars bearing the same date.

All three CLE halves used a different obverse master die and, with the exception of the 1834 CLE, all the obverse master dies are correct for the date as verified by other business and proof marriages. Also correct are the font sizes of the stars and date, as well as the denticle count on the obverse despite the flat wire rim and radial beads that are so prevalent on the crushed lettered edge halves (see Table 4).

From the evidence described above, it is difficult to determine whether the dies were made in the year they were dated or made specifically for the striking of the CLE's. But because there are no major font style discrepancies--as evidenced by the 1801-4 restrike silver dollars--we can postulate that there were only a few years between when the dies were made and dated.

Reverses Emission Order

All CLE specimens examined were struck from the same highly polished reverse die which had no apparent die wear or deterioration. This same reverse die was subsequently used to strike 1836 Overton 106, a common coin, occasionally found in proof and frequently found in a late die state.

Early strikes of the 1836 O-106 reverse clearly show the beaded denticles with the flat wire rim as well as the recut serif of A1 and the thorn-like projection from the olive leaf stem. Later strikes of O-106 have little or no detail around the periphery. A heavy die crack (O-106a) developed through the eagle's left wing, across the field above the eagles's head and into the motto below "US". Finally, a severe die crack from the tip of the eagle's right wing through two arrowheads to the rim caused this die to be retired (see Figure 6). Then the obverse was united with another reverse (Reverse F) previously used with 1836 O-108, a marriage known in proof.

To determine that all CLE's were struck before any 1836 O-106's is not necessary. It is sufficient, for this paper, to state that the majority of the 1836 O-106's and all of the 106a's were struck *after* the CLE's.

Edge Emission Order

In March, 1990 Ivan Leaman and Don Gunnet examined both an 1833 and an 1834 CLE bust half specifically to determine if they could attribute the edge die. Although the edge of the 1833 CLE was crushed beyond recognition, the edge of the 1834 CLE half dollar was clear enough to establish it as edge #3 in 1836! That same edge die was used to create 1836 O-106a!

But why edge #3 and not edge #2? (After all, wasn't the reverse used first on the CLE's?)

After a planchet was processed through the Castaing machine, it was deposited in a container where it remained until struck in the screw press. Consequently, any edge lettered planchet immediately processed for striking would appear *later* in the edge die emission order. That's because contemporary planchets would remain in inventory until all the planchets subsequently processed by the Castaing machine had been struck in the screw press. This Federal practice has been identified in 20th Century business; it is called LIFO (Last in, First Out!)

Once again we have evidence to postulate that the CLE's were struck early in 1836.



Figure 6 - The late strikes of O-106a have a heavy die crack from the middle arrow-head into the tip of the right wing extending through the field to the right of the neck upward into the "U" in PLURIBUS. A second crack from C1 through right wing joins first crack just right of neck. Note the deterioration of the flat wire rim around the periphery, yielding to the previous "look" of denticles.

THE MINT & MACHINERY

The Coining Press

The use of a steam press for coining had been the goal of every Mint Director since the turn of the century. But it wasn't until after Kneass' stroke and the employment of Christian Gobrecht the following month (Sept. '35), that the effects of a steam press received any serious consideration. The Mint was totally unprepared for its arrival in March 1836,⁷ as evidenced by the first production of the reeded edge half dollars in December 1836.⁸

Why was this coveted piece of production equipment to remain idle at the Mint for nine months? There is no evidence that it was used for anything other than medalets commemorating the first steam coinage and possibly Gobrecht's silver dollar patterns.

Is it possible that the steam press had been requisitioned without the knowledge of how it would interface with the existing tooling and/or production methods?

The Castaing Machine

Ever since the Mint discontinued the lettered edge for the half cent (1797), and large cent (1795) and ceased production of silver dollars in 1804, the Castaing machine had been used only for the production of half dollars. While the Mint experimented with partial reeding on the Castaing dies in 1809 and later in 1831-6, they never abandoned the lettered edge design on the half dollars until after the introduction of the steam press in 1836.

Although the Castaing machine was archaic and expensive to operate, it did what the screw press and a collar die (open or closed) could not do: it transferred devices (lettering, stars) other than vertical reeding onto the edge of the coin. The lettered edges on the half dollar had become a tradition; a tradition that was becoming increasingly more difficult to break.

THE ECONOMICS

As we approach the 21st Century, many of us assume that because the lead times for equipment and products in the 1830's was many times what the same item is today, that the pace or tempo of life and business was relaxed and "easy". Nothing could be farther from the truth. The Mint was under extreme pressure to cut costs and increase production. The capitalistic principles of our society were as much alive 200 years ago as they are today!

The Crushed Lettered Edge Bust Half Dollars of 1833-36

In the mid 1830's, the half dollar represented 50% of the Mint's production. See Table 6. The incentive to improve the manufacturing techniques used to produce half dollars was over-whelming. Options included utilizing the new steam press with a closed reeded collar die and retiring the Castaing machine.

The alternative (segmented closed collar dies were not perfected at the U.S. Mint until 1907) was to continue producing lettered edge half dollars using the Castaing machine and a smooth closed collar die. Several proof examples of the Crushed

TABLE 6
FOR THE SIX YEAR PERIOD ENDING IN 1836 48.5% OF THE COINS MINTED WERE
HALF DOLLARS AND REPRESENTED 55.8% OF THE TOTAL BULLION COINED.

	<u>1830</u>	<u>1831</u>	<u>1832</u>	<u>1833</u>	<u>1834</u>	<u>1835</u>	<u>1836</u>
\$0.005	0 \$0	2,200 \$11	15,400 \$77	120,000 \$600	141,000 \$705	398,000 \$1,990	0 \$0
\$0.01	1,711,500 \$17,115	3,359,260 \$33,593	2,362,000 23,620	2,739,000 \$27,390	1,855,10 \$18,551	3,878,400 38,784	2,11,00 \$21,110
\$0.05	1,240,00 \$62,000	1,242,700 \$62,135	965,000 \$48,250	1,370,000 \$68,500	1,480,000 \$74,000	2,760,000 \$138,000	1,900,000 \$95,000
\$0.10	51,000 \$5,100	771,350 \$77,135	522,500 \$52,250	485,000 \$48,500	635,000 \$63,500	1,410,000 \$141,000	1,190,000 \$119,000
\$0.25	0 \$0	398,000 \$99,500	320,000 \$80,000	156,000 \$39,000	286,000 \$71,500	1,952,000 \$488,000	472,000 \$118,000
\$0.50	4,764,800 \$2,382,400	5,873,660 \$2,936,830	4,797,000 \$2,398,500	5,206,000 \$2,603,000	6,412,004 \$3,206,002	5,352,006 \$2,676,003	6,545,000 \$3,272,500
\$2.50	4,540 \$11,350	4,520 \$11,300	4,400 \$11,000	4,160 \$10,400	116,234 \$290,585	131,402 \$328,505	547,986 \$1,369,965
\$5.00	126,35 \$631,755	140,594 \$702,970	157,487 \$787,435	193,630 \$968,150	707,601 \$3,538,005	371,534 \$1,857,670	553,147 \$2,765,73
Pieces	7,898,191	11,792,284	9,143,787	10,273,790	11,632,939	16,253,342	13,319,133
Value	\$3,109,720	\$3,923,474	\$3,401,132	\$3,765,540	\$7,262,848	\$5,669,952	\$7,761,310
% Pieces	60.33%	49.81%	52.46%	50.67%	55.12%	32.93%	49.14%
% Value	76.61%	74.85%	70.52%	69.13%	44.14%	47.20%	42.16%

Lettered Edge half dollars were struck in the screw press in order to define the fabric of these pieces. They, in turn, were used to obtain a timely decision to proceed with requisitioning the tooling for the closed reeded collar die.

It is also conceivable that this tooling program took until December 1836 to complete.

CONCLUDING

In comparing the CLE's with their dated contemporaries, we find that the weight and size are correct for half dollars minted prior to the Coinage Act of 1837. The hubs and punches are correct for the mid 1830's and the emission sequence for the reverse and edge suggest that they were minted early in 1836.

THE PEDIGREE

The first recorded sale of a CLE was from the S.H.&H. Chapman's Winsor Sale on December 16-17, 1895, although Breen gives credit of discovery to H. O. Granberg.⁹ Granberg's CLE was sold by B. Max Mehl's "Collection of a Prominent American" mail bid sale on May 19-21, 1915. Like many of the CLE's offered for sale over the years, there has been little done to establish or even maintain a provenance. This has been compounded by the fact that they have been mis-catalogued and generally ignored by dealer and collector alike. Reappearances of the same example tend to exaggerate the population, so the "pedigree" report (see Table 7) is best described as listing of appearances, photographs, and offers for sale.

ACKNOWLEDGEMENTS

It has been over a year since this article was begun. It would be another year to publication had it not been for Stewart P. Witham, who has generously loaned me all of his notes and photographs for an article on the same subject started in the mid 1970's. Stew was pleased to help since he, too, wanted to see an article on one of his favorite subjects. John J. Pittman, Eric P. Newman and Kenneth E. Bressett all helped in revealing the pedigree and the physical characteristics of the CLE's. I would also like to thank Lynn Vosloh and Richard Doty of the Smithsonian Institution for letting me view the late dated bust half dollars in our National Collection. Bill Subjack was most helpful in his suggestions concerning the collar dies. And lastly, Ivan Leaman and Donald Gunnet deserve thanks for spending many hours squinting through their stereo microscopes trying to identify the edge die used on the CLE's.

TABLE 7
PHOTOGRAPHS, APPEARANCES, & OFFERS FOR SALE
OF CRUSHED LETTERED EDGE BUST HALF DOLLARS 1833-6

<u>Example</u>	<u>1833 Crushed Lettered Edge</u>
A	Smithsonian, Washington, D.C. #1985.0441.252
B	Newman-Bressett - The Fantastic 1804 Dollar p. 59 PHOTO
B	John J. Pittman - ANA Cincinnati, August 1988
C	Richard Picker, November 5, 1958
C	Bowers & Merena Norweb III Sale, November, 1988 - Lot #3105 PHOTO
	S.H.&H. Chapman Winsor Sale, December 1895 Lot 525 (Same as Cox?)
	H. O. Granberg; "Coll. of a Prominent American," May 1915 Lot 798
	Allenburger/Mehl Sale, March, 1948 - Lot #890 PHOTO
	Stack's Cox Sale, April 1962 - Lot #2141

<u>Example</u>	<u>1834 Crushed Lettered Edge</u>
A	Smithsonian, Washington, D.C. #1985.0441.261
B	Newman-Bressett - The Fantastic 1804 Dollar p. 59 PHOTO
B	Breen - Encyclopedia of US & Colonial Coins #4709 PHOTO
B	John J. Pittman - ANA Cincinnati, August 1988
C	Allenburger/Mehl Sale, March 1948 - Lot #904
C	Stack's Empire Sale, November 1957 - Lot #1338 PHOTO
C	Lester Merkin for sale - March 1975
D	Kagin's ANA Sale, August 1983 - XF - Lot #2477 PHOTO
D	Bowers & Ruddy Rare Coin Review #43, April 1982 PHOTO
	S.H.&H. Chapman Winsor Sale, December 1895 Lot 526
	Stack's McPherson Sale, 2/26/53 - Lot #887 (Same as C?)
	Kreisberg-Schulman Brand-Lichtenfels II Sale, March 1964 Lot 1311

<u>Example</u>	<u>1835 Crushed Lettered Edge</u>
A	Newman-Bressett - The Fantastic 1804 Dollar p. 59 PHOTO
A	John J. Pittman - ANA Cincinnati Aug. 1988
	Hollinbeck-Kagin Ad in Numismatist May 1946 - P 594
	Allenburger/Mehl Sale March 1948 - Lot #917
	Stacks Empire Sale November 1957 - Lot #1340

<u>Example</u>	<u>1836 Crushed Lettered Edge</u>
	Stack's Davis-Graves Sale, April 1954 - Lot 533

Note: Because of the lack of photographs and reliable descriptions in auction or other catalogs, it is impossible at this time to trace individual specimens.

ENDNOTES

- ¹ Don Taxay, **The U. S. Mint and Coinage** (New York, 1966) p. 83
- ² The American Numismatic Society, **America's Silver Coinage 1794-1891** (New York, 1987) pp. 41-92
- ³ B. L. C. Wailes' 1829 journal, cited in Don Taxay, **The U. S. Mint and Coinage** (New York, 1966) p. 96
- ⁴ The American Numismatic Society, **America's Silver Coinage 1794-1891** (New York, 1987) pp. 123-4
- ⁵ Eric Newman and Kenneth Bressett, **The Fantastic 1804 Dollar**, (Racine, WI., 1962) pp. 30-4.
- ⁶ *Ibid.*, p. 57
- ⁷ *Ibid.*, p. 31
- ⁸ *Ibid.*, p. 34
- ⁹ Walter Breen, **Walter Breen's Complete Encyclopedia of U. S. and Colonial Coins** (FCI Press, Inc., New York, NY, 1987) p.389

BIBLIOGRAPHY

- American Numismatic Society, **America's Silver Coinage 1794-1891** (The American Numismatic Society, New York, NY, 1987).
- Breen, Walter, **Walter Breen's Encyclopedia of United States and Colonial Proof Coins, 1722-1989** Revised Edition (Bowers and Merena Galleries, Inc., Wolfeboro, NH 1989).
- Breen, Walter, **Walter Breen's Complete Encyclopedia of U. S. and Colonial Coins** (FCI Press, Inc., New York, NY, 1987).
- Davis, David J. et al., **Early United States Dimes 1796-1837** (Ypsilanti, MI, 1984).
- Judd, M. D., J. Hewitt, **United States Pattern, Experimental and Trial Pieces** Sixth Edition (Western Publishing Company, Inc., Racine, WI, 1977).
- Newman, Eric P. and Kenneth E. Bressett, **The Fantastic 1804 Dollar** (Whitman Publishing Company, Racine, WI, 1962).
- Parsons, J. D., "1834 Proof 'Restrike' Half Dollar" in **Bowers & Ruddy Rare Coin Review**, #43 (Los Angeles, CA, April 1982).
- Overton, Al C., **Early Half Dollar Die Varieties 1794-1836** Revised Edition (Colorado Springs, CO, 1970).
- Taxay, Don, **The Comprehensive Catalog and Encyclopedia of United States Coins** (Scott Publishing Co., New York, NY, 1971).
- Taxay, Don, **The U.S. Mint and Coinage** (reprinted by Sanford J. Durst, Long Island City, NY, 1983).
- Yeoman, R. S., **A Guide Book of United States Coins** edited by Kenneth Bressett 36th Edition (Western Publishing Company, Inc., Racine, WI, 1983).

Russell J. Logan

The REAL Toughies - A Numeric Census

Many times over the past few years my phone rang and the caller, with a new cherry in hand, wondered, "How many are there of the" such and such date and Overton number. My ignorance was vast and the caller disappointed. So awhile back I set to work on identifying the number of R-8's, R-7's, R-6's and high R-5's actually known to the collecting community. I spoke with long time BHNCers, interpolated want lists, chatted with numerous collectors, kept an eye on fixed price lists, reviewed past and present auction catalogues and tuned into whatever grapevine was operating.

Since Don Parsley, in his revision of the Overton Book, had the courage to suggest a condition census for each variety, I thought my necessarily imperfect numeric census might be of benefit to bust half collectors, provided the reader applies the necessary grains of salt. No one professes to have seen every coin in the condition census and, rest assured, I have not seen every coin counted in the numeric census to follow. More importantly, I cannot have been apprised of every rare marriage that now rests in a collection.

The proposed ranking and numeric census is limited to die marriages (encompassing all die states or "subvarieties") with fewer than 41 known specimens. The R-5 rarity rating is an estimated 31 to 80 existing. It is interesting to note that no one has ever assembled a complete set of the 450 Turban Head varieties described in the 1990, 3rd edition, of Overton's reference book. One collector is just three die marriages away. (Or is six - or seven?! See next paragraph.) He and four others are the only collectors to have acquired each die marriage described in Overton's 1970, 2nd edition, an accomplishment even Al Overton could not claim. Just three of these notable collections remain intact.

Elsewhere in this issue you will find Russ Logan's engrossing article on the crushed edge, beaded border proofs of 1833, 1834 and 1835 (1836?!). I leave the reader to question whether these wondrous coins should be included in the numeric census. (My vote is yes.) At the ANA summer convention in Seattle the BHNC voted to add these yet unnumbered waifs to the list of collectible bust halves. For the record, Russ reports that three 1833's, four 1834's and just one 1835 have been traced, with the possibility of four other 1833's, three other 1834's, three other 1835's and one 1836. Will the owners please step forward! Surely Jules Reiver can locate one among his duplicates. After all, 1,093,435, 848 is a lot of busties!! (See Russ's brain teaser in the last **JR Journal**, Vol.5, No.2, page 5.

<u>Rank</u>	<u>Date & Overton No.</u>	<u>No. pieces known</u>
1	1825 O-118	1 (another reliably reported)
2/3	1829 O-120	2
2/3	1827 O-149	2
4	1823 O-113	3
5	1832 O-123	4 (including Smithsonian specimen)
6/7	1827 O-148	7
6/7	1817/4 O-102	7 (another rumored)
8/9	1817 O-104	13
8/9	1827 O-137	13
10	1831 O-120	14
11	1830 O-114	25
12/13	1836 O-121	26
12/13	1833 O-115	26
14	1823 O-109	27
15/16	1827 O-124	28
15/16	1824 O-102	28
17/18	1827 O-144	29
17/18	1827 O-127	29
19	1827 O-122	32
20/21	1828 O-123	33
20/21	1827 O-145	33
22/23	1809 O-101	34
22/23	1828 O-105	34
24	1811 O-113	35
25	1826 O-103	36
26	1809 O-104	37
27	1809 O-113	39
28	1809 O-112	40

Sheridan Downey

NOW AVAILABLE!

Fully revised 3rd edition of Early Half Dollar Die Varieties, 1794-1838, by Al C. Overton,
edited by Donald Parsley

Retail price, \$59.95

Price to JRCS members \$49.95 postpaid

Include check with your order and mail to:

Sheridan Downey
405 14th Street, Suite 800
Oakland, CA 94612

'TWAS THE NIGHT BEFORE A BHNC

(Bust Half Nut's Christmas)

'Twas the night before Christmas, and all through our home,
The Grand-Kids were here -- o'er the house, they did roam.

Their gifts were all opened. This place is a mess.
I hope there's no permanent harm to assess.

By now, they are nestled, each snug in his bed.
But after that clamor, this house sure seems dead!

Mom's in her housecoat. I've donned my red cap.
It's entirely too soon for a long winter's nap.

The place is so quiet -- too quiet indeed.
I certainly need a good coin book to read.

There's Sheldon, and Newcombe, and Dan Valentine,
Breen, Bolender, Browning . . . Can't make up my mind.

I bought a half dollar a few days ago --
Its attribution, I'd sure like to know.

The Overton book is the one, but I hate
That my favorite book is so far out of date.

I know there's one missing! I'm missing a book!
Where can it be? I must hurry and look.

It just is not here! It cannot be found!
But here in its place is a book -- leatherbound.

"Another new cookbook", I thought to myself
As I took the new volume down from the shelf.

Then what to my wondering eyes should appear?
The new Overton book! My eye shed a tear.

I opened its leatherbound cover in awe.
Why, this book was signed by Al's Son-In-Law!

I went to my chair and I turned on the light.
MERRY CHRISTMAS TO ALL! I MAY BE UP ALL NIGHT!

A Little Journey Through the Bust Half Auctions of 1988-1990, with Prices Realized

In June of 1988 serious collectors of bust half dollars convened in Beverly Hills, California to witness and to participate in Superior Galleries' sale of Woody Blevins' collection. Although the collection had little to offer in the way of "quality," it had been 11 years since a collection containing so many scarce die varieties had come to the auction block. With constant prodding from the mysterious (bidder) "Number 104," virtually every bust half rated R-5 or tougher brought a record price. A new age was born to the pricing scale of rare die marriages.

Skeptics wondered whether the prices realized at the Blevins' Sale were an aberration. But when Paul Munson's collection was presented by Superior in October, 1989, the new levels held. And "Number 104" was on the sidelines. More empirical evidence of unsated demand for the rare marriages came with Superior's sale of Roland Willasch's collection in May, 1990 and with Coin Galleries' lightly publicized sale of Eric Gutscher's Turban Head halves in July, 1990. In the meantime your writer commenced a series of mail bid sales that were peppered with R-5's. Between June, 1988 and the close of 1990 over 140 R-5 and R-6 bust halves found new homes at auction. The prices at which these coins changed hands were in the public domain.

One may ask why there was so sudden an upheaval in the prices of R-5 - R-8 busties. The Bust Half Nut Club probably contributed in two ways, both inadvertent. First, by 1988 its numbers had grown to four or five times its original nucleus of a dozen or so members. BHNC had long shared census information among its members. As the number of "insiders" grew, more member-collectors became aware of the truly rare die marriages. Second, in 1987 the BHNC published its second Supplement to Overton's standard work on bust halves. This time the Supplement contained an authoritative revision of the rarity ratings that Al Overton had put forth 17 years before. The new rarity ratings were also published in **The Numismatist** and the **John Reich Journal**. Dealers and collectors around the country now had a reliable pricing tool that, until BHNC went public, was fraught with uncertainty.

The timing of the Blevins' sale was perfect. Many die variety collectors started their collections after the 1977 sale of Carl McClurg's collection (Bowers and Ruddy's "Getty Sale"). A powerful frustration visits collectors who wait years to cherry or to just find an offering of rare marriages. "Number 104" provided the catalyst that

revealed the depth of pent up demand: his underbidders had to lay their cards on the table and the strength of the market for rare busties was laid bare. Hesitant bidders at the Blevins sale had not come away empty handed. They digested the events and found the confidence that allowed them to compete in later sales.

It is pleasant to note that the recent price crash of "investor quality" coins, i.e., not so rare high grade type coins, left nary a ripple on the sea of demand for (or value of) rare busties. Those who chased Allen Lovejoy's early dime in October, 1990 and Stack's auction sale will attest that the market for rare collector coins is alive and well. Segments of our hobby remain bastions for the laws of supply and demand, untainted by fanciful promotions. They're not making any more R-5's. And one should remember that the recent "outpouring" of these marriages at auction did not create a single new one: the known population was simply redistributed, although a few recent "cherries" made their debuts in the writer's mail bid sales.

Will the demand increase? You betcha! The third edition of Overton is on the streets and JRCS and BHNC membership continues to rise. I will wager that the collector who dusts off back issues of the **JR Journal** in the year 2000 would give her eye teeth to buy rare busties at the prices shown below. Heaven help us if a bust half collection, comparable to Robbie Brown's large cents or Allen's bust dimes, comes on the market. The combination of rarity and high quality is yet to be explored.

The following is a selection of prices realized at several significant offerings of Turban Head Half Dollars during the period June, 1988 through October, 1990. Except as noted all coins were sold at auction. There were nine die marriages that failed to appear at any of the auctions reported here. Just one escaped both auction and private offerings during the 2-1/2 years. The reader may enjoy ferreting out the no-shows. If you have one of the AWOL puppies I hope you will bring it to my table at the 100th anniversary ANA Convention in Chicago, to show and crow. Here are the auction sales that provided grist for this little essay.

1. **Blevins-Bodway Sale**, June 5, 1988, Superior Galleries (H. W. "Woody" Blevins' collection)
2. **Mail Bid Sales Nos. 1, 2 and 3**, September, 1989, March, 1990, and October, 1990 conducted by Sheridan Downey
3. **Jascha Heifitz Sale**, October 1, 1989, Superior Galleries (Paul Munson Collection)
4. **Boy's Town Sale**, May 27, 1990, Superior Galleries (Roland Willasch collection)
5. **Coin Galleries Mail Bid Sale**, July 18, 1990 (Eric Gutscher collection)

The grades shown are those of the catalogers. All prices *include* applicable buyer's commissions. Unless otherwise noted all varieties are currently rated R-5 (31 to 80 pieces known).

Selected Auction Prices Realized - Turban Head Half Dollars

R-5 - R-8 only, for the period 1988 - 1990

Date/Variety	Blevins		Downey		Munson		Willasch		Gutscher	
1808 O-110	VG	\$275	VF	\$660	Gd	\$165	F	\$528	F	\$385
			Gd	162			F	374		
							VG	440		
1809 O-101	Gd	330	F+	814			VF	3740	VG	715
O-104	VF	935	F	866	VG	462	XF	1375	VF	1045
O-112	VG	198	VF	725	VG	352	VF	550	VF	425
			F	538						
O-113	Gd	176	VF	924	F	440	VG	264	F	225
			VF	341						
O-114	Gd	220	VG	404	Gd	220	F	352	VG	176*
			VF	1155						
			VF	462						
1811 O-113	VG	462			AG	528	F	715	VF	880
1812 O-101	VF	3300	VF	4950			VF	5250	VF	4455
1817 O-102 R-7			F	P/S						
O-104 R-6			VF	P/S						
1820 O-107	VG	462			Gd	352	XF	990	VF	550*
1822 O-103	AG	209	VF	852	Gd	638**	VF	715	VG	304
			VF	735						
1823 O-109 R-6	F+	825					F+	2200		
							(Blevins' Coin)			
O-113 R-7			F	P/S						
1824 O-102	Gd	275	VF	2541	VF	1980				
O-114	AU	1540	F	374	AG	143	VF	396		
			F	490						
			F	346						
1825 O-109	VG	418	VF	832	F	935	VF	1045	F	550*
O-118 R-7			F	P/S						
1826 O-103	AU	1430	F	676	VF	1120	XF	850	VF	687
O-115	VF	506	VF	539	VG	138	XF	633		
			F	205						
1827 O-116	VF	550	F	254	Gd	253	VF	440	VG	275*
			VF	427						
			F	194						
O-122	VF	253	F	485			F	250	VF	605
O-123	VF	253			F	330	VF	440		

Date/Variety	Blevins		Downey		Munson	Willasch		Gutscher	
1827 O-124	Gd	\$275**	F	\$1411		VF	\$4180	VF	\$2310
			VF	2730					
O-127			VF	1575	VF	\$4070	VF	3080	
O-137 R-6	VF	4400	F	P/S					
O-144	VF	312			VG	528	F	495	
O-145	VF	313			Gd	396	XF	1155	VF 770
O-148 R-7			AU	P/S					
O-149 R-7									
1828 O-105	F	264	VF	820	VG	330	VF	525	VG 467*
O-123	XF	1265	VF	935			VF	990	VG 352*
1829 O-120 R-7			F	P/S					
1830 O-114 R-6			F	3300#					
			VG	2400#					
1831 O-120	VG	5775	VF	7500#					
1832 O-109	(large lot)		VF	202	F	308	AU	990	
							VF	176	
							VF	110	
O-117	(large lot)		XF	693	VF	506	VF	297	F 175
			F	105					
O-123 R-7			Prf	35,000#					
			XF	P/S					
1833 O-115	VG	1265	Unc	4500#	VG+	1815			
			F+	1761					
1836 O-121	F	825	VF	2762			VF	1980	

Key to abbreviations:

- + = Coin described as damaged
- * = Coin grouped with one other coin. Price shown is for the lot.
- ** = Coin grouped with more than one other coin. Price shown is for the lot.
- # = Coin sold privately during the same 3 year period at price shown
- P/S = Coin of indicated grade sold privately during the same 2-1/2 year period at an undisclosed price.

The writer invites your comments, corrections, suggestions and other correspondence regarding bust half dollars at the following address:

Sheridan Downey
 405 14th St., Suite 800
 Oakland, CA 94612
 PH: 415-444-4000
 FAX: 415-451-5961

An Ode to the Bust Half Nut Club

I want to be a Bust Half Nut
to this I make my plea,
100 different die marriages
how far off can that be!?

I scour the bourse floor with Al O. in hand,
Any Bust Halves have thee?
I wait until they shake their head,
I'm sorry, you'll get none from me.

When suddenly, out of the corner of my eye
A glimmer from under a dealer's light,
I spot an R-4 with multiple die cracks
My heart flutters with delight!

I search my Overton to double check,
My lens fogging from my breath.
I nearly drop her to the floor,
My shaking hands are full of sweat!

Ah-ha! I think, but not out loud,
An EF-45 for sure.
I've searched high and low,
from end to end, and almost out the door.

I ask the dealer, "Sir, how much?"
"A Hundred Twenty Fife"
A bargain for sure, a steal in fact,
but how do I explain it to the wife!?

She knows not what a Bust Half is,
and really doesn't care.
It's food or clothes, or child's toy,
Do I even dare?

Oh, what the heck, I'll live but once,
The wife, she'll see to that!
Only 63 more and I'll be a Nut,
Some feather for my hat!

The count is high and seems out of reach,
Several years away for sure!
Oh please BHNC, lower your limit,
for I don't know if I can endure!

I love the lady in EF or better,
I dread the thought of Good!
To compromise quality for quantity,
I don't think that I could!

I respect you all who passed the test,
A milestone you should be proud of!
But think how much better BHNC will be,
by letting in more collectors who share your love!

So please, I beg, not once or twice,
but daily and by the minute!
I love the coin, I love the club,
and lower requirements would get me in it!

William P. Brodniak, Jr.

FOR SALE: Back issues of the JR Journal.

Vol. 1	No. 1	1/86 - photocopy						
Vol. 1	No. 2	5/86,	Vol. 1	No. 3	9/86 - reprint			
Vol. 2	No. 1	1/87,	Vol. 2	No. 2	7/87,	Vol. 2	No. 3	12/87
Vol. 3	No. 1	4/88,	Vol. 3	No. 2/3	12/88			
Vol. 4	No. 1	7/89,	Vol. 4	No. 2	9/89,	Vol. 4	No. 3	12/89
Vol. 5	No. 1	7/90,	Vol. 5	No. 2	10/90			

To order send \$3.50 per copy or 3/\$10.00 to:
JRCS

P.O. Box 205

Ypsilanti, MI 48197

